AMENDMENTS TO THE CLAIMS

Claims (status identifier)

CLAIMS

WHAT IS CLAIMED IS:

1. (currently amended) A label printer-cutter comprising:

a frame;

a print head assembly connected to the frame, the print head assembly including a print head for printing to a label media;

a cutting assembly connected to the frame, the cutting assembly ~~for cutting of the label media; and~~comprising:

a cutter to cut the label media; and

a pair of rollers connected to the frame;

a roller positioning assembly in engagement with and for positioning the pair of cutting assembly rollers into one of a cutting position and a non-cutting position; and

a controller in operative association with the print head assembly and the cutting assembly;

wherein the controller can be programmed to control the print head assembly and the cutting assembly such that printing ~~to and cutting of the label media does not occur simultaneously in the label printer-cutter.~~by the print head to the label media corresponds to the pair of cutting assembly rollers being positioned by the roller positioning assembly into the non-cutting position, and cutting of the label media by the cutting assembly cutter corresponds to the pair of cutting assembly rollers being positioned by the roller positioning assembly into the cutting position.

2. (currently amended) A label printer-cutter comprising:

a frame;

a print head assembly connected to the frame, the print head assembly including a print head for printing to a label media;

~~The label printer-cutter of claim 1~~ wherein the print head assembly further comprises:

a print head lift cam connected to the frame; and

a print head assembly pin in operative association with the print head lift cam, the pin housing a print head load spring;

wherein the load spring housed within the print head assembly pin can be compressed via rotation of the cam so as to transfer a media-specific load to the label media.

3. (original) The label printer-cutter of claim 2 wherein the print head assembly further comprises:

a print head mount connected to the print head assembly pin; and

a print head pivot pin;

wherein the print head pivot pin passes through, so as to pivotally connect, the print head assembly pin and the print head mount.

4. (original) The label printer-cutter of claim 1 wherein the print head is a thermal print head.

5. (original) The label printer-cutter of claim 1 wherein the print head is a variably loadable print head.

6. (currently amended) ~~The label printer-cutter of claim 1~~ A label printer-cutter comprising:

a frame;

a print head assembly connected to the frame, the print head assembly including a print head for printing to a label media;

a cutting assembly connected to the frame, the cutting assembly for cutting of the label media; and

a controller in operative association with the print head assembly and the cutting assembly;

wherein the controller can be programmed to control the print head assembly and the cutting assembly such that printing to and cutting of the label media does not occur simultaneously in the label printer-cutter

wherein the cutting assembly further comprises:

a cutting assembly frame connected to the frame;

a plotter cutter slide rail pivotally secured to the cutting assembly frame;

a plotter cutter connected to the plotter cutter slide rail for plotter cutting a label media;

an end cutter slide rail secured to the cutting assembly frame;

an end cutter connected to the end cutter slide rail for end cutting the label media; and

a drive mechanism connected to the plotter cutter and the end cutter for driving at least one of the plotter cutter to perform a plotter cut to the label media and an end cutter to perform an end cut to the label media.

7. (currently amended) ~~The label printer-cutter of claim 1~~ A label printer-cutter comprising:

a frame;

a print head assembly connected to the frame, the print head assembly including a print head for printing to a label media;

a cutting assembly connected to the frame, the cutting assembly for cutting of the label media; and

a controller in operative association with the print head assembly and the cutting assembly;

wherein the controller can be programmed to control the print head assembly and the cutting assembly such that printing to and cutting of the label media does not occur simultaneously in the label printer-cutter

wherein the cutting assembly further comprises:

a plotter cutter slide rail pivotally secured to the frame;

a plotter cutter connected to the plotter cutter slide rail for plotter cutting the label media;

an end cutter slide rail secured to the frame;

an end cutter connected to the end cutter slide rail for end cutting the label media; and

a drive mechanism connected to the plotter cutter and the end cutter for driving at least one of the plotter cutter to perform a plotter cut to the label media and an end cutter to perform an end cut to the label media.

8. (original) The label printer-cutter of claim 1 wherein the cutting assembly further comprises a plotter cutter connected to the frame for plotter cutting the label media.

9. (original) The label printer-cutter of claim 1 wherein the cutting assembly further comprises an end cutter connected to the frame for end cutting the label media.

10. (currently amended) ~~The~~A label printer ~~cutter of claim 1~~ cutter comprising:

a frame;

a print head assembly connected to the frame, the print head assembly including a print head for printing to a label media;

a cutting assembly connected to the frame, the cutting assembly for cutting of the label media; and

a controller in operative association with the print head assembly and the cutting assembly;

wherein the controller can be programmed to control the print head assembly and the cutting assembly such that printing to and cutting of the label media does not occur simultaneously in the label printer-cutter

wherein the cutting assembly includes a pair of rollers and wherein the printer-cutter further includes a roller positioning assembly comprising a slide plate for positioning the pair of rollers into one of a cutting position and a non-cutting position.

11. (original) The label printer-cutter of claim 10 wherein the roller positioning assembly slide plate further comprises a plurality of slots for engaging the pair of cutting assembly rollers, at least one of the slots including a sloped portion for positioning the pair of cutting assembly rollers into the cutting and non-cutting positions.

12. (original) The label printer-cutter of claim 11 wherein the roller positioning assembly further comprises a drive assembly connected to the frame, the drive assembly to accomplish at least one of driving at least one of the pair of cutting assembly rollers to effect positioning of the label media for cutting in the cutting assembly, and driving the slide plate to position the cutting assembly pair of rollers into the cutting and non-cutting positions.

13. (original) The label printer-cutter of claim 12 wherein the roller positioning assembly further comprises a cam assembly connected to the drive assembly to drive the slide plate to position the cutting assembly pair of rollers.

14. (currently amended) ~~The label printer-cutter of claim 1~~A label printer-cutter comprising;

a frame;

a print head assembly connected to the frame, the print head assembly including a print head for printing to a label media;

a cutting assembly connected to the frame, the cutting assembly for cutting of the label media; and

a controller in operative association with the print head assembly and the cutting assembly;

wherein the controller can be programmed to control the print head assembly and the cutting assembly such that printing to and cutting of the label media does not occur simultaneously in the label printer-cutter further comprising a platen roller to drive the label media in the label printer-cutter during printing and a pair of cutting assembly rollers to drive the label media in the label printer-cutter during cutting, and wherein the controller is programmed to transfer primary driving responsibility of the label media between the platen roller and the cutting assembly pair of rollers.

15. (original) The label printer-cutter of claim 1 wherein only one of printing to and cutting of the label media is possible at a specified time during operation of the label printer-cutter.

16. (original) The label printer-cutter of claim 1 wherein the cutting assembly is operable to cut the label media only after the print head of the print head assembly has completed printing to the label media.

17. (original) The label printer-cutter of claim 1 wherein the print head is unloaded from the label media prior to the cutting assembly effecting cutting of the label media.

18. (original) A label printer-cutter comprising:

a frame;

a print head assembly connected to the frame, the print head assembly including a print head for printing to a label media;

a cutting assembly connected to the frame, the cutting assembly comprising:

a cutter to cut the label media; and

a pair of rollers connected to the frame;

a roller positioning assembly comprising a slide plate for positioning the pair of rollers into one of a cutting position and a non-cutting position; and

a controller in operative association with the print head assembly, the cutting assembly and the roller positioning assembly;

wherein the controller ensures that printing to and cutting of the label media in the label printer-cutter are mutually exclusive.

19. (original) The label printer-cutter of claim 18 wherein the print head is a thermal print head capable of printing a dot line to a label media.

20. (original) The label printer-cutter of claim 18 wherein the cutter is one of an end cutter and a plotter cutter.

21. (original) The label printer-cutter of claim 18 wherein the roller positioning assembly further comprises a drive assembly connected to the frame, the drive assembly to accomplish at least one of driving at least one of the pair of cutting assembly rollers to effect positioning of the label media for cutting in the cutting assembly, and driving the slide plate to position the cutting assembly pair of rollers into the cutting and non-cutting positions.

22. (original) The label printer-cutter of claim 18 wherein the roller positioning assembly further comprises cam assembly connected to the drive assembly to move the slide plate to position the cutting assembly pair of rollers.

23. (original) The label printer-cutter of claim 18 wherein only one of printing to and cutting of the label media is possible at a specified time during operation of the label printer-cutter.

24. (original) The label printer-cutter of claim 18 wherein the cutting assembly is operable to cut the label media only after the print head of the print head assembly has completed printing to the label media.

25. (currently amended) A method for selectively printing to and cutting of a label media in a label printer-cutter, the method comprising:

printing to a label media using a print head assembly;

cutting the label media using a cutting assembly, the cutting assembly including a pair of rollers;

positioning the pair of rollers into one of a cutting position and a non-cutting position using a roller positioning assembly that is in engagement the pair of cutting assembly rollers; and

using a controller that is in operable association with the print head assembly and the cutting assembly to control the print head assembly and the cutting assembly such that printing to the label media corresponds to the pair of cutting assembly rollers being positioned by the roller positioning assembly into the non-cutting position, and cutting of the label media by the cutting assembly cutter corresponds to the pair of cutting assembly rollers being positioned by the roller positioning assembly into the cutting position..

26. (currently amended) A method for selectively printing to and cutting of a label media in a label printer-cutter, the method comprising:

printing to a label media using a print head assembly;

cutting the label media using the cutting assembly;

using a controller that is in operable association with the print head assembly and the cutting assembly to control the print head assembly and the cutting assembly such that printing to and cutting of the label media does not occur simultaneously in the label printer-cutter.

~~The method of claim 25~~ wherein the cutting assembly includes a pair of rollers and wherein the printer-cutter further includes a roller positioning assembly comprising a slide plate.

27. (original) The method of claim 26 further comprising positioning the pair of rollers into one of a cutting position and a non-cutting position.

28. (currently amended) ~~The method of claim 25~~A method for selectively printing to and cutting of a label media in a label printer-cutter, the method comprising:

printing to a label media using a print head assembly;

cutting the label media using the cutting assembly;

using a controller that is in operable association with the print head assembly and the cutting assembly to control the print head assembly and the cutting assembly such that printing to and cutting of the label media does not occur simultaneously in the label printer-cutter further comprising driving, using a platen roller, the label media during printing and driving, using a pair of cutting assembly rollers, the label media in during cutting.

29. (original) The method of claim 28 further comprising transferring, using a programmed controller, primary driving responsibility of the label media between the platen roller and the cutting assembly pair of rollers.

30. (currently amended) A system for effecting mutually exclusive printing and cutting operations in a label printer-cutter, the system comprising:

a frame;

a label media supply to supply a label media;

an ink ribbon supply to supply a thermally-sensitive ink for application to the label media;

a print head assembly connected to the frame, the print head assembly including a thermal print head for printing a dot line using the thermally-sensitive ink to the label media;

a cutting assembly connected to the frame, the cutting assembly comprising;

a cutter to cut the label media; and

a pair of rollers connected to the frame;

a roller positioning assembly in engagement with and for positioning the pair of cutting assembly rollers into one of a cutting position and a non-cutting position; and

a controller in operative association with the print head assembly and the cutting assembly;

wherein the controller can be programmed to control the print head assembly and the cutting assembly such that printing by the print head to the label media corresponds to the pair of cutting assembly rollers being positioned by the roller positioning assembly into the non-cutting position, and cutting of the label media by the cutting assembly cutter corresponds to the pair of cutting assembly rollers being positioned by the roller positioning assembly into the cutting position..

31. (currently amended) A system for effecting mutually exclusive printing and cutting operations in a label printer-cutter, the system comprising:

a frame;

a label media supply to supply a label media;

an ink ribbon supply to supply a thermally-sensitive ink for application to the label media;

a print head assembly connected to the frame, the print head assembly including a thermal print head for printing a dot line using the thermally-sensitive ink to the label media;

a cutting assembly connected to the frame, the cutting assembly for cutting of the label media; and

a controller in operative association with the print head assembly and the cutting assembly;

wherein the controller can be programmed to control the print head assembly and the cutting assembly such that printing to and cutting of the label media does not occur simultaneously in the label printer-cutter.

~~The system of claim 30~~ wherein the cutting assembly includes a pair of rollers and wherein the system further includes a roller positioning assembly comprising a slide plate for positioning the pair of rollers into one of a cutting position and a non-cutting position.

32. (original) The system of claim 31 wherein the roller positioning assembly slide plate further comprises a plurality of slots for engaging the pair of cutting assembly rollers, at least one of the slots including a sloped portion for positioning the pair of cutting assembly rollers into the cutting and non-cutting positions.

33. (original) The system of claim 32 wherein the roller positioning assembly further comprises a drive assembly connected to the frame, the drive assembly to accomplish at least one of driving at least one of the pair of cutting assembly rollers to effect positioning of the label media for cutting in the cutting assembly, and driving the slide plate to position the cutting assembly pair of rollers into the cutting and non-cutting positions.

34. (original) The system of claim 33 wherein the roller positioning assembly further comprises cam assembly connected to the drive assembly to drive the slide plate to position the cutting assembly pair of rollers.

35. (currently amended) ~~The system of claim 30~~A system for effecting mutually exclusive printing and cutting operations in a label printer-cutter, the system comprising:

a frame;

a label media supply to supply a label media;

an ink ribbon supply to supply a thermally-sensitive ink for application to the label media;

a print head assembly connected to the frame, the print head assembly including a thermal print head for printing a dot line using the thermally-sensitive ink to the label media;

a cutting assembly connected to the frame, the cutting assembly for cutting of the label media; and

a controller in operative association with the print head assembly and the cutting assembly;

wherein the controller can be programmed to control the print head assembly and the cutting assembly such that printing to and cutting of the label media does not occur simultaneously in the label printer-cutter further comprising a platen roller to drive the label media in the label printer-cutter during printing and a pair of cutting assembly rollers to drive the label media in the label printer-cutter during cutting, and wherein the controller is programmed to transfer primary driving responsibility of the label media between the platen roller and the cutting assembly pair of rollers.

36. (original) The system of claim 30 wherein only one of printing to and cutting of the label media is possible at a specified time during operation of the label printer-cutter.

37. (original) The system of claim 30 wherein the cutting assembly is operable to cut the label media only after the print head of the print head assembly has completed printing to the label media.

38. (currently amended) ~~The system of claim 30~~ A system for effecting mutually exclusive printing and cutting operations in a label printer-cutter, the system comprising:

a frame;

a label media supply to supply a label media;

an ink ribbon supply to supply a thermally-sensitive ink for application to the label media;

a print head assembly connected to the frame, the print head assembly including a thermal print head for printing a dot line using the thermally-sensitive ink to the label media;

a cutting assembly connected to the frame, the cutting assembly for cutting of the label media; and

a controller in operative association with the print head assembly and the cutting assembly;

wherein the controller can be programmed to control the print head assembly and the cutting assembly such that printing to and cutting of the label media does not occur simultaneously in the label printer-cutter

wherein the print head is unloaded from the label media prior to the cutting assembly effecting cutting of the label media.

39. (original) The system of claim 30 wherein the label media supply is a label media supply cartridge.

40. (original) The system of claim 39 wherein the label media supply cartridge is one of a disposable and a reusable label media supply cartridge.

41. (original) The system of claim 30 wherein the ink ribbon supply is an ink ribbon supply cartridge.

42. (original) The system of claim 41 wherein the ink ribbon supply cartridge is one of a disposable and a reusable ink ribbon supply cartridge.

43. (original) A label printer-cutter comprising:

a frame;

a print head assembly connected to the frame, the print head assembly comprising:

a print head lift cam connected to the frame;

a print head assembly pin in operative association with the print head lift cam, the assembly pin housing a print head load spring that can be compressed via rotation of the cam so as to transfer a media-specific load to the label media;

a print head mount connected to the print head assembly pin; and

a print head pivot pin that passes through, so as to pivotally connect, the print head assembly pin and the print head mount; and

a thermal print head connected to the print head mount, the print head for printing a dot line to the label media;

a cutting assembly connected to the frame, the cutting assembly comprising:

a plotter cutter slide rail pivotally secured to the frame;

a plotter cutter connected to the plotter cutter slide rail for plotter cutting the label media;

an end cutter slide rail secured to the frame;

an end cutter connected to the end cutter slide rail for end cutting the label media; and

a drive mechanism connected to the plotter cutter and the end cutter for driving at least one of the plotter cutter to perform a plotter cut to the label media and an end cutter to perform an end cut to the label media; and

a controller in operative association with the print head assembly and the cutting assembly;

wherein the controller can be programmed to control the print head assembly and the cutting assembly such that printing to and cutting of the label media cannot occur simultaneously in the label printer-cutter.

44. (original) The label printer cutter of claim 43 wherein the cutting assembly includes a pair of rollers and wherein the printer-cutter further includes a roller positioning assembly comprising a slide plate for positioning the pair of rollers into one of a cutting position and a non-cutting position.

45. (original) The label printer cutter of claim 44 wherein the roller positioning assembly slide plate further comprises a plurality of slots for engaging the pair of cutting assembly rollers, at least one of the slots including a sloped portion for positioning the pair of cutting assembly rollers into the cutting and non-cutting positions.

46. (original) The label printer-cutter of claim 45 wherein the roller positioning assembly further comprises a drive assembly connected to the frame, the drive assembly to accomplish at least one of driving at least one of the pair of cutting assembly rollers to effect positioning of the label media for cutting in the cutting assembly, and driving the slide plate to position the cutting assembly pair of rollers into the cutting and non-cutting positions.

47. (original) The label printer-cutter of claim 44 wherein the roller positioning assembly further comprises cam assembly connected to the drive assembly to drive the slide plate to position the cutting assembly pair of rollers.

48. (original) The label printer-cutter of claim 43 further comprising a platen roller to drive the label media in the label printer-cutter during printing and a pair of cutting assembly rollers to drive the label media in the label printer-cutter during cutting, and wherein the controller is programmed to transfer primary driving responsibility of the label media between the platen roller and the cutting assembly pair of rollers.

49. (original) The label printer-cutter of claim 43 wherein only one of printing to and cutting of the label media is possible at a specified time during operation of the label printer-cutter.

50. (original) The label printer-cutter of claim 43 wherein the cutting assembly is operable to cut the label media only after the print head of the print head assembly has completed printing to the label media.

51. (original) The label printer-cutter of claim 43 wherein the print head is unloaded from the label media prior to the cutting assembly effecting cutting of the label media.